



PCT

RAW SEQUENCE LISTING

DATE: 07/08/2004

PATENT APPLICATION: US/10/500,530

TIME: 16:00:43

Input Set : A:\B45292SEQLIST.TXT

Output Set: N:\CRF4\07082004\J500530.raw

4 <110> APPLICANT: Cindy Castado
 5 Joelle Thonnard
 7 <120> TITLE OF INVENTION: Novel Compounds
 10 <130> FILE REFERENCE: B45292
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/500,530
 C--> 12 <141> CURRENT FILING DATE: 2004-07-01
 12 <150> PRIOR APPLICATION NUMBER: GB 0200025.5
 13 <151> PRIOR FILING DATE: 2002-01-02
 15 <160> NUMBER OF SEQ ID NOS: 87
 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ENTERED

(ps,6)

19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 453
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Haemophilus influenzae
 24 <400> SEQUENCE: 1
 25 gtgtgctatg agccatttat ttattaccca atgatgtgca atgaaaagat agcgcgtgct 60
 26 attattcttg aagatgatgc gattgtatcg cacgaattcg aagcaattgt aaaagacagt 120
 27 ttgaagaaag tttcaaaaaa tgttgaaatt ttattttatg atcatggtaa agcaaaaagt 180
 28 tattgctgga aaaaaacact tgtcaaaaat taccgtttag ttcactatcg taaaccctct 240
 29 aaaacgtcta aacgtgcaat catgtgtaca acagcttatt taattacttt atctggcgct 300
 30 caaaaactcc tacaaatagc ctatcctatc cgtatgctcg ctgactactt aactgggtgct 360
 31 ttacaattaa ctggactaaa ggcttatggg gttgaaccac cttgtgtatt taaaggcgca 420
 32 atttcagaaa ttgatgcaat ggagcaacgc taa 453
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 150
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Haemophilus influenzae
 39 <400> SEQUENCE: 2
 40 Val Cys Tyr Glu Pro Phe Ile Tyr Tyr Pro Met Met Cys Asn Glu Lys
 41 1 5 10 15
 42 Ile Ala Arg Ala Ile Ile Leu Glu Asp Asp Ala Ile Val Ser His Glu
 43 20 25 30
 44 Phe Glu Ala Ile Val Lys Asp Ser Leu Lys Lys Val Ser Lys Asn Val
 45 35 40 45
 46 Glu Ile Leu Phe Tyr Asp His Gly Lys Ala Lys Ser Tyr Cys Trp Lys
 47 50 55 60
 48 Lys Thr Leu Val Lys Asn Tyr Arg Leu Val His Tyr Arg Lys Pro Ser
 49 65 70 75 80
 50 Lys Thr Ser Lys Arg Ala Ile Met Cys Thr Thr Ala Tyr Leu Ile Thr
 51 85 90 95
 52 Leu Ser Gly Ala Gln Lys Leu Leu Gln Ile Ala Tyr Pro Ile Arg Met
 53 100 105 110
 54 Pro Ala Asp Tyr Leu Thr Gly Ala Leu Gln Leu Thr Gly Leu Lys Ala

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55          115          120          125
56 Tyr Gly Val Glu Pro Pro Cys Val Phe Lys Gly Ala Ile Ser Glu Ile
57          130          135          140
58 Asp Ala Met Glu Gln Arg
59 145          150
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 1032
63 <212> TYPE: DNA
64 <213> ORGANISM: Haemophilus influenzae
66 <400> SEQUENCE: 3
67 atgaaattaa aaaataaatt acaaatgtta aggttgggtc taggcaaata tttccttgat      60
68 aaaaaaaacg gattaaacag aataacaaat gttcctagaa gcacccctctt cctccgccaa      120
69 gacggaaaaa ttgggggatta tgtggtgagc tcatttgtat tccgtgagat aaaaaaattt      180
70 aatccccaca ttaaaatttg tgaatttgt accaaacaaa atgcttatct ttttaaacaa      240
71 aatccatata tcgatcaact ttactatgta aaaaagaaaa gtattttgga ttacatcaaa      300
72 tgtggtctag caattcaaaa agaacaatat gatttagtga ttgatccgac gattatgatt      360
73 cgtaatcgcg atcttttact tttacgctta atcaatgcc a gcattatat tggctaccaa      420
74 aaagccaatt atggtttatt taatattaat ctggaggggac aatttcactt ttcggaactc      480
75 tataaactcg ccttagaaaa agtgaatatt acggtacaag atataagcta tgacatccca      540
76 tttgataagc aaagtgcggt cgaaatttct gaatttttgc agaaaaacca actagaaaag      600
77 tatattgcta ttaattttta tgggtgctgca agaatacaaa agtaaacaa tgacaacatc      660
78 aaaaaatatt tagattatct cacgcaagtc cgcggaggaa aaaagctggt gctattaagc      720
79 tatcctgaag taacagagaa attaacacaa ttgtcagccg attatccgca tatttttgtc      780
80 catccaacaa ccaagatctt tcataccatt gaattgattc gccactgtga tcaattaatc      840
81 tctacagaca cgtctactgt acatattgct tcagggttta ataaaccaat tattggtatt      900
82 tataaagaag atcctattgc gtttacacat tggcaaccca gaagtcgggc agaaacgcac      960
83 atacttttct ataaagaaaa tattaatgag ctctcacctg aacaaattga ccctgcatgg      1020
84 cttgtcaaat ag                                     1032
86 <210> SEQ ID NO: 4
87 <211> LENGTH: 343
88 <212> TYPE: PRT
89 <213> ORGANISM: Haemophilus influenzae
91 <400> SEQUENCE: 4
92 Met Lys Leu Lys Asn Lys Leu Gln Met Leu Arg Leu Gly Leu Gly Lys
93 1          5          10          15
94 Tyr Phe Leu Asp Lys Lys Asn Gly Leu Asn Arg Ile Thr Asn Val Pro
95          20          25          30
96 Arg Ser Ile Leu Phe Leu Arg Gln Asp Gly Lys Ile Gly Asp Tyr Val
97          35          40          45
98 Val Ser Ser Phe Val Phe Arg Glu Ile Lys Lys Phe Asn Pro His Ile
99          50          55          60
100 Lys Ile Gly Val Ile Cys Thr Lys Gln Asn Ala Tyr Leu Phe Lys Gln
101 65          70          75          80
102 Asn Pro Tyr Ile Asp Gln Leu Tyr Tyr Val Lys Lys Lys Ser Ile Leu
103          85          90          95
104 Asp Tyr Ile Lys Cys Gly Leu Ala Ile Gln Lys Glu Gln Tyr Asp Leu
105          100          105          110
106 Val Ile Asp Pro Thr Ile Met Ile Arg Asn Arg Asp Leu Leu Leu Leu
107          115          120          125

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```

108 Arg Leu Ile Asn Ala Lys His Tyr Ile Gly Tyr Gln Lys Ala Asn Tyr
109      130      135      140
110 Gly Leu Phe Asn Ile Asn Leu Glu Gly Gln Phe His Phe Ser Glu Leu
111 145      150      155      160
112 Tyr Lys Leu Ala Leu Glu Lys Val Asn Ile Thr Val Gln Asp Ile Ser
113      165      170      175
114 Tyr Asp Ile Pro Phe Asp Lys Gln Ser Ala Val Glu Ile Ser Glu Phe
115      180      185      190
116 Leu Gln Lys Asn Gln Leu Glu Lys Tyr Ile Ala Ile Asn Phe Tyr Gly
117      195      200      205
118 Ala Ala Arg Ile Lys Lys Val Asn Asn Asp Asn Ile Lys Lys Tyr Leu
119      210      215      220
120 Asp Tyr Leu Thr Gln Val Arg Gly Gly Lys Lys Leu Val Leu Leu Ser
121 225      230      235      240
122 Tyr Pro Glu Val Thr Glu Lys Leu Thr Gln Leu Ser Ala Asp Tyr Pro
123      245      250      255
124 His Ile Phe Val His Pro Thr Thr Lys Ile Phe His Thr Ile Glu Leu
125      260      265      270
126 Ile Arg His Cys Asp Gln Leu Ile Ser Thr Asp Thr Ser Thr Val His
127      275      280      285
128 Ile Ala Ser Gly Phe Asn Lys Pro Ile Ile Gly Ile Tyr Lys Glu Asp
129      290      295      300
130 Pro Ile Ala Phe Thr His Trp Gln Pro Arg Ser Arg Ala Glu Thr His
131 305      310      315      320
132 Ile Leu Phe Tyr Lys Glu Asn Ile Asn Glu Leu Ser Pro Glu Gln Ile
133      325      330      335
134 Asp Pro Ala Trp Leu Val Lys
135      340

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137 <210> SEQ ID NO: 5

138 <211> LENGTH: 813

139 <212> TYPE: DNA

140 <213> ORGANISM: Haemophilus influenzae

142 <400> SEQUENCE: 5

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143 atgccagaat tacctgaagt tgaaaccaca aaaaatggaa ttagccctta tcttgaaggg      60
144 gctatcattg aaaaaattgt tggtcgccaa ccgaaattac gctggatggt aagcgaagaa      120
145 ttagcgcaaa ttacacaaca aaaagtcatc gcattaagtc gccgtgcgaa gtatttaatt      180
146 atccaacttg aaacaggcta tatgattgga catttaggga tgtcagggtc attgagagtt      240
147 gtggagaaaag gggatcttat tgataaacat gatcatcttg atatcgtagt gaataacgga      300
148 aaagttgtgc gttataacga tcctcgtcgt tttggagcgt gggtatggac agagaagttg      360
149 aacgaatttc ctctttttct gaaattaggc ccagagcctc tgtctgagga atttgattct      420
150 gattacttgt ggcaaaaaaag tcgtaaaaaa cagaccgcac ttaaaacttt tttaatggat      480
151 aatgctgtcg tcgttggcgt tgggaaatatac tatgcgaatg aaacggttatt tctttgtaac      540
152 ctacatccgc aaaaaacagc agggagttta actaaggcac aatgtgggca gttagtagaa      600
153 caaataaaac aagtgtgtgc taacgcaatc caacaagggtg gtacgacgct aaaagatttt      660
154 ctccaaccgg atgggcgtcc aggetatttt gtccaagaat tgcgggttta tggtataaag      720
155 gataagcctt gtccaacatg tggcacaaaa atagaaagtt tagtgatagg gcaacgaaat      780
156 agtttctatt gcccgaagtg tcagaagaga taa                                813

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158 <210> SEQ ID NO: 6

159 <211> LENGTH: 270

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160 <212> TYPE: PRT
161 <213> ORGANISM: Haemophilus influenzae
163 <400> SEQUENCE: 6
164 Met Pro Glu Leu Pro Glu Val Glu Thr Thr Lys Asn Gly Ile Ser Pro
165 1 5 10 15
166 Tyr Leu Glu Gly Ala Ile Ile Glu Lys Ile Val Val Arg Gln Pro Lys
167 20 25 30
168 Leu Arg Trp Met Val Ser Glu Glu Leu Ala Gln Ile Thr Gln Gln Lys
169 35 40 45
170 Val Ile Ala Leu Ser Arg Arg Ala Lys Tyr Leu Ile Ile Gln Leu Glu
171 50 55 60
172 Thr Gly Tyr Met Ile Gly His Leu Gly Met Ser Gly Ser Leu Arg Val
173 65 70 75 80
174 Val Glu Lys Gly Asp Leu Ile Asp Lys His Asp His Leu Asp Ile Val
175 85 90 95
176 Val Asn Asn Gly Lys Val Val Arg Tyr Asn Asp Pro Arg Arg Phe Gly
177 100 105 110
178 Ala Trp Leu Trp Thr Glu Lys Leu Asn Glu Phe Pro Leu Phe Leu Lys
179 115 120 125
180 Leu Gly Pro Glu Pro Leu Ser Glu Glu Phe Asp Ser Asp Tyr Leu Trp
181 130 135 140
182 Gln Lys Ser Arg Lys Lys Gln Thr Ala Leu Lys Thr Phe Leu Met Asp
183 145 150 155 160
184 Asn Ala Val Val Val Gly Val Gly Asn Ile Tyr Ala Asn Glu Thr Leu
185 165 170 175
186 Phe Leu Cys Asn Leu His Pro Gln Lys Thr Ala Gly Ser Leu Thr Lys
187 180 185 190
188 Ala Gln Cys Gly Gln Leu Val Glu Gln Ile Lys Gln Val Leu Ser Asn
189 195 200 205
190 Ala Ile Gln Gln Gly Gly Thr Thr Leu Lys Asp Phe Leu Gln Pro Asp
191 210 215 220
192 Gly Arg Pro Gly Tyr Phe Val Gln Glu Leu Arg Val Tyr Gly Asn Lys
193 225 230 235 240
194 Asp Lys Pro Cys Pro Thr Cys Gly Thr Lys Ile Glu Ser Leu Val Ile
195 245 250 255
196 Gly Gln Arg Asn Ser Phe Tyr Cys Pro Lys Cys Gln Lys Arg
197 260 265 270

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199 <210> SEQ ID NO: 7

200 <211> LENGTH: 726

201 <212> TYPE: DNA

202 <213> ORGANISM: Haemophilus influenzae

204 <400> SEQUENCE: 7

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205 atgagaat ttagccgcagg gagtttacgc cagcctttta cgttatggca acaagcatta 60
206 atccaacagt atcacctaca agtcgaaatt gaatttggac cggcgggggt gttgtgccaa 120
207 cgcattgagc aaggggaaaa agtggatttg tttgcctctg ccaatgatgc gcatcttagg 180
208 catttacaag cgcgatatcc tcatattcaa cttgtgcctt ttgctacaaa tcgtttatgt 240
209 ttaattgcaa agaaatcggt gattactcac catgatgaga attggttgac attattgatg 300
210 tcgccccact tacgcttagg agtatcgaca cctaaggcag atccttgtgg agattatact 360
211 ttggcattat tttcgaatat tgaaaaacgg catatgggct atggctcgga attaaaagaa 420

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212 aaagcaatgg caatagttgg tgggtccggat tctatcacta ttccaacagg acgaaatacc      480
213 gcagagtggc tttttgagca gaattatgct gatcttttca ttggttatgc gagtaatcat      540
214 caatctttgc gtcagcattc tgatatttgt gttttggata ttcctgatga gtataatgtg      600
215 agggcgaaact atacattagc agcttttact gcggaagcat tacgccttgt ggactccttg      660
216 ctttgtttga cttgcggaca aaaatattta cgcgattgcy gctttttgcc tgccaatcat      720
217 agctga                                                                    726
219 <210> SEQ ID NO: 8
220 <211> LENGTH: 241
221 <212> TYPE: PRT
222 <213> ORGANISM: Haemophilus influenzae
224 <400> SEQUENCE: 8
225 Met Arg Ile Leu Ala Ala Gly Ser Leu Arg Gln Pro Phe Thr Leu Trp
226   1           5           10          15
227 Gln Gln Ala Leu Ile Gln Gln Tyr His Leu Gln Val Glu Ile Glu Phe
228           20           25           30
229 Gly Pro Ala Gly Leu Leu Cys Gln Arg Ile Glu Gln Gly Glu Lys Val
230           35           40           45
231 Asp Leu Phe Ala Ser Ala Asn Asp Ala His Leu Arg His Leu Gln Ala
232           50           55           60
233 Arg Tyr Pro His Ile Gln Leu Val Pro Phe Ala Thr Asn Arg Leu Cys
234 65           70           75           80
235 Leu Ile Ala Lys Lys Ser Val Ile Thr His His Asp Glu Asn Trp Leu
236           85           90           95
237 Thr Leu Leu Met Ser Pro His Leu Arg Leu Gly Val Ser Thr Pro Lys
238           100          105          110
239 Ala Asp Pro Cys Gly Asp Tyr Thr Leu Ala Leu Phe Ser Asn Ile Glu
240           115          120          125
241 Lys Arg His Met Gly Tyr Gly Ser Glu Leu Lys Glu Lys Ala Met Ala
242           130          135          140
243 Ile Val Gly Gly Pro Asp Ser Ile Thr Ile Pro Thr Gly Arg Asn Thr
244 145          150          155          160
245 Ala Glu Trp Leu Phe Glu Gln Asn Tyr Ala Asp Leu Phe Ile Gly Tyr
246           165          170          175
247 Ala Ser Asn His Gln Ser Leu Arg Gln His Ser Asp Ile Cys Val Leu
248           180          185          190
249 Asp Ile Pro Asp Glu Tyr Asn Val Arg Ala Asn Tyr Thr Leu Ala Ala
250           195          200          205
251 Phe Thr Ala Glu Ala Leu Arg Leu Val Asp Ser Leu Leu Cys Leu Thr
252           210          215          220
253 Cys Gly Gln Lys Tyr Leu Arg Asp Cys Gly Phe Leu Pro Ala Asn His
254 225          230          235          240
255 Ser
258 <210> SEQ ID NO: 9
259 <211> LENGTH: 741
260 <212> TYPE: DNA
261 <213> ORGANISM: Haemophilus influenzae
263 <400> SEQUENCE: 9
264 atgaatgaat tgagtttaga tgcagataag ctgttatttg gttatgataa gccgttgtat      60
265 ttaccactta ctttccaatg taagaaagga gaggttattt cggtatttgg aacaaatgga      120

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/500,530

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 163

Seq#:12; Xaa Pos. 80

Seq#:14; Xaa Pos. 49

VERIFICATION SUMMARY

DATE: 07/08/2004

PATENT APPLICATION: US/10/500,530

TIME: 16:00:44

Input Set : A:\B45292SEQLIST.TXT

Output Set: N:\CRF4\07082004\J500530.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:160
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:64
L:443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:48